

(19) 世界知的所有権機関  
国際事務局



(43) 国際公開日  
2002 年 10 月 17 日 (17.10.2002)

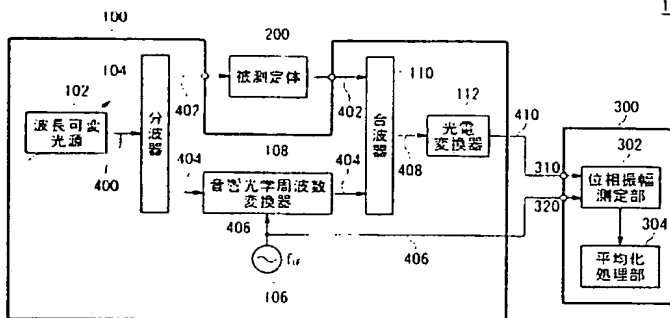
PCT

(10) 国際公開番号  
WO 02/082038 A1

- (51) 国際特許分類: G01M 11/02 (72) 発明者: および  
(21) 国際出願番号: PCT/JP02/03285 (75) 発明者/出願人 (米国についてのみ): 城戸 隆 (KIDO, Takashi) [JP/JP]; 〒179-0071 東京都 練馬区 旭町 1 丁目 3 2 番 1 号 株式会社アドバンテスト内 Tokyo (JP). 仁木 尚治 (NIKI, Shoji) [JP/JP]; 〒179-0071 東京都 練馬区 旭町 1 丁目 3 2 番 1 号 株式会社アドバンテスト内 Tokyo (JP).  
(22) 国際出願日: 2002 年 4 月 2 日 (02.04.2002)  
(25) 国際出願の言語: 日本語  
(26) 国際公開の言語: 日本語  
(30) 優先権データ: 特願 2001-102933 2001 年 4 月 2 日 (02.04.2001) JP (81) 指定国 (国内): DE, JP, US.  
特願 2002-1521 2002 年 1 月 8 日 (08.01.2002) JP  
添付公開書類:  
— 国際調査報告書  
(71) 出願人 (米国を除く全ての指定国について): 株式会社アドバンテスト (ADVANTEST CORPORATION) [JP/JP]; 〒179-0071 東京都 練馬区 旭町 1 丁目 3 2 番 1 号 Tokyo (JP).  
2 文字コード及び他の略語については、定期発行される各 PCT ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: OPTICAL NETWORK ANALYZER

(54) 発明の名称: 光ネットワークアナライザ



102: WAVELENGTH VARIABLE LIGHT SOURCE  
104: VARIABLE ATTENUATOR  
108: PHASE SHIFTER  
112: PHOTOELECTRIC CONVERTER  
112: PHOTOELECTRIC CONVERTER  
300: PHASE MEASUREMENT BLOCK  
302: PHASE DETECTOR  
304: AVERAGE/PROCESSING UNIT

(57) Abstract: An optical network analyzer for measuring optical characteristic of an object to be measured comprises a first multiplexer for multiplexing a first optical signal which has transmitted the object to be measured, with a second optical signal having a frequency different from the first optical signal, thereby outputting a third optical signal, a first photoelectrical converter for converting the third optical signal into a first electric signal, and a phase measurement block for comparing the phase of the first electric signal to a phase of a first reference signal.

(57) 要約:

被測定体の光特性を測定する光ネットワークアナライザであって、被測定体を透過した第 1 の光信号と、第 1 の光信号と周波数が異なる第 2 の光信号とを合波して第 3 の光信号を出力する第 1 合波器と、第 3 の光信号を第 1 電気信号に変換する第 1 光電変換器と、第 1 電気信号と第 1 参照信号との位相を比較する位相測定部とを備える。

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP02/03285

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> G01M11/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G01M11/00-11/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2002
Kokai Jitsuyo Shinan Koho	1971-2002	Jitsuyo Shinan Toroku Koho	1996-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	JP 62-156535 A (Yokogawa Electric Corp.), 11 July, 1987 (11.07.87), Full text; all drawings Full text; all drawings & GB 2185567 A & DE 3643569 A & US 4856899 A	1, 7, 13, 18 2, 4, 8, 10, 14, 16-17, 19, 21-22
A	JP 2-281123 A (Nippon Telegraph And Telephone Corp.), 16 November, 1990 (16.11.90), Full text; all drawings (Family: none)	1, 2, 4
A	JP 2000-329650 A (Advantest Corp.), 30 November, 2000 (30.11.00), Par. Nos. [0060] to [0062]; Fig. 8 (Family: none)	12

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

"A" Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier document but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
21 June, 2002 (21.06.02)

Date of mailing of the international search report  
09 July, 2002 (09.07.02)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.